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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,781	10/05/2005	Gregorius Maria Hubertus Goyarts	GOY4	5611

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EXAMINER	
KHATRI, PRASHANT J	
ART UNIT	PAPER NUMBER
1794	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,781	GOYARTS, GREGORIUS MARIA HUBERTUS	
	Examiner	Art Unit	
	PRASHANT J. KHATRI	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/5/2005, 2/9/2007, 5/11/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitation "the interfacial region" in line 3. There is insufficient antecedent basis for this limitation in the claim.

4. Claims 2-7 recite the limitation "multilayer material" in line 1. There is insufficient antecedent basis for this limitation in the claim. Examiner notes that claim 1 should read "A multilayer material" and claims 2-7 should read "The multilayer material".

5. Regarding claim 4, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

6. The term "smaller part" in claim 1 is a relative term which renders the claim indefinite. The term "smaller part" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear on the size of the "smaller part".

7. Claims 8-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 8-21 recite the limitation "Method" in the first line. There is insufficient antecedent basis for this limitation in the claim. Examiner notes that claim 8 should read “A method” and claims 9-21 should read “The method”.

9. Claim 8 recites the limitation "the interfacial region" in line 6. There is insufficient antecedent basis for this limitation in the claim.

10. The term "smaller part" in claim 8 is a relative term which renders the claim indefinite. The term "smaller part" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear on the size of the "smaller part".

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 4-6, 8-10, 13-14, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Tolbert et al. (***US 20010001300***).

13. Tolbert et al. disclose a method of constructing textile products using curable hot melt adhesives and products made thereof. Prior art discloses that the adhesive used is a moisture curable hot melt polyurethane that reacts with moisture present in the atmosphere to become a thermoset adhesive (***para. 0016***). Prior art also states the adhesive material may be applied between the surfaces of two or more adjacent textile fabrics to form a seam securing the fabrics to each other (***para. 0015***). Concerning the dot pattern of the adhesive, prior art discloses that the pattern may be applied in a "discontinuous bead or pattern" and further for forming decorative patterns such as a quilted look across the surface of the fabric (***para. 0078-0079***). Given that prior art discloses an identical multilayer washable material to the presently claimed multilayer washable article comprising a moisture-curable polyurethane, therefore, the Examiner takes the position that the adhesive would inherently prevent wrinkling. Concerning the phrase "fully moisture-cured", Examiner takes the position that the phrase means degree of curing and as disclosed by prior art, the process is dependent on time span the textiles and adhesives are allowed to cure (***para. 0038***). Furthermore, prior art discloses that the full cure time for polyurethane adhesive is a period from 1 to 10 days (***para.0049***). Therefore, it is clear that the polyurethane adhesive is fully moisture cured as presently claimed. Prior art also discloses the adhesive material is applied at an initial melt temperature (***para. 0039***). Furthermore, it is noted that the adhesive material is solid at room temperature and once a softening point temperature is reached, a phase change occurs (i.e. solid to liquid phase change) (***para. 0038***). Examiner takes the position that the application of the adhesive material at a temperature above the

softening point is equivalent to Applicant's claim that the adhesive material is applied at a temperature higher than the melting point. Concerning the adhesive application to the border, prior art discloses the adhesive may be applied to the edge of a textile fabric to provide threadless seams (***para. 0015, middle of para.***). Examiner takes the position that the application of adhesive material to the edges is equivalent to the Applicant's claim of patterning a border as the adhesives on the edges will create a border.

14. Claims 1, 2, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ternstrom (***EP 0211815***).

15. Ternstrom discloses an absorbent product and method of producing said product. Prior art discloses the absorbent product is comprised of an outer layer impermeable to liquid wherein the said outer layer is facing away from the wearer and another outer layer that faces the wearer that is permeable to liquid. Additionally, an absorptive body is disposed between the two outer layers. The laminate is constructed by means of a binding agent (***p. 1, lines 1+***). The impermeable outer layer and permeable outer layer may be comprised of a polyethylene film and a fiber fabric respectively. The absorptive body may be comprised of a fluffed cellulosic fiber material (***p. 4, lines 4+***). Prior art discloses that the binding agent is applied to the inner sides of the outer layers while forming a "network-like pattern" (***pp. 2-3, lines 31+ starting on p. 2***). Examiner takes the position that the "network-like pattern" will form areas of adhesive and areas where there is no adhesive as shown by Figure 3 of the prior art. Additionally, prior art also discloses the binding agent is applied on the inner sides of

the outer layers by means of a slot nozzle and each layer is advanced with a layer of the absorptive material disposed there between forming the laminate structure (***pp.4-5; lines 32+ starting on p. 4***). Regarding the wrinkling, prior art discloses the networked pattern of the adhesive material allow for secure attachment, which would inherently thereby prevent wrinkling of the laminate (***p. 3, lines 14+***).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 1-6 and 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ternstrom in view of McIntyre (***US 4911948***).

18. Ternstrom discloses an absorbent product and method of producing said product. Prior art discloses the absorbent product is comprised of an outer layer impermeable to liquid wherein the said outer layer is facing away from the wearer and another outer layer that faces the wearer that is permeable to liquid. Additionally, an absorptive body is disposed between the two outer layers. The laminate is constructed by means of a binding agent (***p. 1, lines 1+***). The impermeable outer layer and permeable outer layer may be comprised of a polyethylene film and a fiber fabric respectively. The absorptive body may be comprised of a fluffed cellulosic fiber material

(***p. 4, lines 4+***). The binding agent is a hot-melt glue that is applied in a bead fashion to the layers (***pp. 1-2, lines 27+ starting on p. 1***). Furthermore, prior art discloses that the binding agent is applied to the inner sides of the outer layers while forming a "network-like pattern" (***pp. 2-3, lines 31+ starting on p. 2***). Examiner takes the position that the application of the binding agent in the form of beads or dots and further forming a network of beads or dots is equivalent to the patterning claimed by Applicant. Prior art also discloses the binding agent is applied on the inner sides of the outer layers by means of a slot nozzle and each layer is advanced with a layer of the absorptive material disposed there between forming the laminate structure (***pp.4-5; lines 32+ starting on p. 4***). Additionally, prior art states both the outer layers containing the hot-melt adhesive on the inner sides are attached to the absorptive material by projecting the outer layers past the absorptive layer and mutually attaching the two outer layers on said absorptive layer (***p. 5, lines 15+***). However, prior art is silent to a rotary screen printing process and the exact nature of the hot melt adhesive material.

19. McIntyre discloses a method of screen printing of hot melt adhesives onto moving web substrates such as diapers and the like (***col. 2, lines 19+***). The screen printing apparatus is comprised of a slot nozzle within a screen cylinder sleeve (***col. 3, lines 37+***). Furthermore, it is noted that the hot melt adhesive material can be a polyurethane moisture cure type (***col. 6, lines 14+***). Regarding the heated stencil, prior art discloses the screen cylinder sleeve is heated to prevent solidification of the adhesive material (***col. 2, lines 39+***). Examiner takes the position that since the screen cylinder has pores to allow dispersion of the adhesive material as the stencil as the

adhesive material is distributed through the pores, which is the primary purpose of the stencil. Given that the screen cylinder is heated to prevent the clogging of the pores, the temperature would inherently be at a temperature above the melting point as if the temperature would be below, the pores of the screen cylinder would be clogged. Concerning the seamless nature of the cylinder, as shown by prior art in Figure 3, there is no seam on the cylinder. Regarding the cutting of individual articles made from the continuous process, prior art discloses a die cutting process may be added after the screen printing process (***col. 2, lines 8+***). Examiner takes the position that the use of a cutting process after lamination to produce individual articles is an obvious addition to the manufacturing process as it would allow for easier packaging of goods for sale.

20. All of the elements were known within the art individually. The only difference was a single disclosure disclosing all of the elements. Ternstrom discloses an absorbent product comprising permeable and impermeable outer layers and an absorptive layer disposed in between. The laminate is constructed by means of a hot-melt adhesive. McIntyre discloses a rotary screen printing process onto web substrates using a hot melt adhesive. Although McIntyre only discloses the screen printing process onto one layer of material, it would be obvious to one with ordinary skill in the art to use a second screen printing section to coat a second layer of material. As shown by Ternstrom, the two outer layers contain adhesive material on the inner surfaces of each outer layer with the adhesive material dispensed by means of a slot nozzle. Furthermore, it is also known within the art that screen printing allows for a faster production of material and would thereby reduce the amount of time spent on

production. It is also noted that each process uses a slot nozzle to dispense the adhesive material but the screen printing allows for fast printing of the adhesive material onto a larger surface area which would again speed up production time. Thus, it would have been obvious to one with ordinary skill in the art to apply a rotary screen printing process as disclosed by McIntyre to produce the laminate disclosed by Ternstrom.

21. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ternstrom in view of McIntyre as applied to claims 1, 3, and 15 above, and further in view of Keuhn et al. (***US 20010039405***).

22. Ternstrom discloses the above in paragraph 15 but is silent to the use of a rotary screen printing process to apply the adhesive or an additional functional layer.

23. McIntyre disclose the above in paragraph 19 but is silent to an additional functional layer.

24. Keuhn et al. disclose an absorbent article comprising an outermost layer (i.e. away from skin) that is liquid impermeable (***para.0058***); an innermost layer that may be liquid permeable (***para. 0061***); and an absorbent body disposed between the above two layers (***para. 0063***). The absorbent body may be in contact with a further layer disposed between the two outer sheets, with said further layer being a surge management layer to prevent pooling of liquids (***para. 0131***). Examiner takes the position that the surge layer is equivalent to the dispersion layer claimed by Applicant as the purpose of the layer is prevent pooling of liquids and to disperse the liquids. It is noted that the laminate may be constructed by means of adhesive such as a hot-melt

adhesive (***para. 0055***). However, note that while Keuhn et al. does not disclose all the features of the present claimed invention, Keuhn et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely, the additional functional layer in order to show multiple layers within the absorptive layers and in combination with the primary reference, discloses the presently claimed invention.

25. All of the elements were known within the art individually. The only difference was the elements in a single disclosure. Ternstrom discloses an absorbent product comprising permeable and impermeable outer layers and an absorptive layer disposed in between. The laminate is constructed by means of a hot-melt adhesive. Keuhn et al. disclose an absorbent article with the claimed structure and further comprising a surge layer that prevents pooling of liquid. Concerning the surge layer, the benefit of adding the surge layer to the laminate structure is to prevent pooling of liquids in the absorbent layer and therefore, providing comfort to the user. The motivation to combine all of the references stems from the fact that consumer satisfaction is increased with the addition of a liquid dispersing layer by providing the user more comfort when using the article. Thus, it would have been obvious to one with ordinary skill in the art to apply the surge layer disclosed by Keuhn into the laminate disclosed by Ternstrom, which is made by the process disclosed McIntyre. The resultant product would have increased

interlaminar peel strength for the adhesives between the layers and provide the user with additional comfort.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRASHANT J. KHATRI whose telephone number is (571)270-3470. The examiner can normally be reached on M-F 8:00 A.M.-5:00 P.M. (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PRASHANT J KHATRI
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794